Precious Metals & Rhenium Consortium

Precious Metals Cyanides Working Group

1. Welcome & Introduction

1.	**Welcome and introduction**
2.	Phase I
3.	Phase II: Data gap analysis and ITS
4.	Phase III: Testing programme
5.	Phase IV: Use, exposure, and emission data collection
6.	Phase V: Dossier finalisation
7.	AOB, next meetings/calls and closing remarks

Steven Verberckmoes

Welcome & Introduction

- Reminder on Confidentiality and Competition Law
- Tour de table and apologies
- Agenda approval
  - Next slide

Agenda approval

Precious Metals Cyanides Working Group Members were emailed the draft agenda on October 1st, 2014

1. Welcome and introduction
2. Phase I
3. Phase II: Data gap analysis and ITS
4. Phase III: Testing programme
5. Phase IV: Use, exposure, and emission data collection
6. Phase V: Dossier finalisation
7. AOB, next meetings/calls and closing remarks

Status of actions

Legend:
- Done
- Ongoing
- Not started

#	What?	Who?	When?	Status
	Contact Cu Consortium as last resort to obtain contact details of LR of Cu CN		Jul 2012	Done
	Obtain stability constants of PM CN to be used to calculate the amount of free cyanide that is likely to be released in aqueous and/or physiologically relevant solutions		Jul 2012	Done
	Validate amounts of free cyanide released in aqueous and/or physiologically relevant solutions using an analytical measurement		Jul 2012	Done
	Confirm realistic (versus optimistic) registration submission windows for PM CN- project	R. Nicolay	Dec 2014	Work plan updated, CON approval to do
	Identify LR for remaining PM CN-	R. Nicolay	Q4 2015	PMC approved, To propose to SIEF
	Prepare 2015-2020 budget projection for PM CN-	R. Nicolay	Dec 2014	Not started

2. Phase I

1. Welcome and introduction
2. **Phase I**
   a. Inventory and latest classifications
   b. Outcome of literature searches
3. Phase II: Data gap analysis and ITS
4. Phase III: Testing programme
5. Phase IV: Use, exposure, and emission data collection
6. Phase V: Dossier finalisation
7. AOB, next meetings/calls and closing remarks

Renaud Nicolay & WCA

Inventory & Classification

IUPAC Name	Potassium dicyanoargentate	Silver cyanide	Potassium dicyanoaurate
CAS nr	506-61-6	506-64-9	13967-50-5
EINECS nr	208-047-0	208-048-6	237-748-4
REACH category	Mono-constituent	Mono-constituent	Mono-constituent
Dossier prepared	Substance	Substance	Substance
Highest tonnage band (t/a)	10-100 t/a	10-100 t/a	10-100 t/a
Registration deadline	2018	2018	2018
Lead Registrant	SAXONIA Holding GmbH	SAXONIA Holding GmbH	Umicore

- Classification: see next slide

Inventory & Classification (continued)

IUPAC Name	Potassium dicyanoargentate	Silver cyanide	Potassium dicyanoaurate
Classification	Acute tox. 2 (H330: Fatal if inhaled)	Acute tox. 2 (H330: Fatal if inhaled)	Acute tox. 2 (H330: Fatal if inhaled)
	Acute tox. 1 (H310: Fatal in contact with skin)	Acute tox. 1 (H310: Fatal in contact with skin)	Acute tox. 1 (H310: Fatal in contact with skin)
	Acute tox. 2 (H300: Fatal if swallowed)	Acute tox. 2 (H300: Fatal if swallowed)	Acute tox. 2 (H300: Fatal if swallowed)
	EUH032: contact with acids liberates very toxic gas	EUH032: contact with acids liberates very toxic gas	EUH032: contact with acids liberates very toxic gas
	Skin Irrit. 2 (H315)	Skin Irrit. 2 (H315)	Skin Irrit. 2 (H315)
	Eye dam. 1 (H318)	Eye dam. 1 (H318)	Eye dam. 1 (H318)
	Aquatic acute 1 (H400)	Aquatic acute 1 (H400)	Aquatic acute 1 (H400)
	Aquatic chronic 1 (H410)	Aquatic chronic 1 (H410)	Aquatic chronic 1 (H410)
	Met. Corr. 1 (H290)	Met. Corr. 1 (H290)	Met. Corr. 1 (H290)
	Skin Sens. 1A or 1B?		Skin Sens. 1A or 1B?

- New classification: potassium dicyanoaurate as Skin Sensitiser
  - new classification of potassium dicyanoaurate with read-across to potassium dicyanoargentate: to be discussed if read-across is agreed for this endpoint?
  - Is it 1A or 1B?

Literature search - strategy

- Searches conducted individually for each substance name and CAS number.
- Databases searched:
  - *Toxline: http://toxnet.nlm.nih.gov*
  - *Thomson Innovation: http://info.thomsoninnovation.com*
  - *US-EPA ECOTOX Database: http://cfpub.epa.gov/ecotox/*

Date of search	Period covered
November 2012	Jan 2009 – Oct2012
November 2013	Nov 2012 – Nov 2013

Reliability and relevance assessment

- All results were combined and any duplicate records were removed
- Data screened based on title and abstract
- Copies of each potentially relevant study – subject to detailed assessment (Klimisch et al. 1997, ToxRTool)

Outcome and next steps

Search date	Number of results	Number of potentially relevant results	Number of relevant studies
November 2012	181	0	0
November 2013	11	0	0

- Searches of the published literature are scheduled to take place every year

- Next search – to be conducted in November 2014

3. Phase II: Data Gap Analysis & Integrated Testing Strategy

1. Welcome and introduction
2. Phase I
3. **Phase II: Data gap analysis and ITS**
4. Phase III: Testing programme
5. Phase IV: Use, exposure, and emission data collection
6. Phase V: Dossier finalisation
7. AOB, next meetings/calls and closing remarks

Renaud Nicolay

Data Gap Analysis & Integrated Testing Strategy

- In order to provide a comprehensive and compliant registration dossier, the data gap analysis is pointing out at endpoints that can only be generated through a testing programme once these have been considered
  - Klimisch 1 & 2 existing studies (literature search)
  - Waiver/Exemptions (typically for substances where the endpoint is not applicable)
  - Read-across from other substance(s)

- The status on dossier completion is further discussed under
  - item 2 “Phase I: Outcome of literature searches”
  - item 5 “Phase V: Dossier finalisation”

4. Phase III: Testing Programme

1. Welcome and introduction
2. Phase I
3. Phase II: Data gap analysis and ITS
4. **Phase III: Testing programme**
   a. Current status, bottlenecks and next steps
   b. Status and timing of PNEC and DNEL derivation
5. Phase IV: Use, exposure, and emission data collection
6. Phase V: Dossier finalisation
7. AOB, next meetings/calls and closing remarks

WCA

Testing status at last WG meeting: Toxicology

- Dustiness testing conducted at DMT for Potassium dicyanoargentate, potassium dicyanoaurate and silver cyanide and respiratory tract deposition modelling conducted
- Inhalation route unlikely to be relevant
- Dissociation constants for potassium dicyanoaurate and silver cyanide indicate low expected release of free CN-
  - » Agreed to test remaining mamtox endpoints
- Measured CN- concentrations from ecotoxicity studies with potassium dicyanoargentate indicate high release of free CN-
  - » Agreed to read across from soluble cyanide substance

Current testing status: Toxicology

- Genetic toxicology studies
  - » Ames Screen
  - » Ames Main study (OECD471)
  - » *In vitro* Micronucleus Assay (OECD487)
    - *Testing facility Covance UK. Switched to Harlan UK due to lack of sufficient containment for potential CN liberation during cell culture preparation*
  - » *In vitro* Mammalian cell gene mutation assay (OECD476): if OECD487 tests are negative
  - » Test formulations
    - Potassium dicyanoaurate in purified water
    - Silver cyanide insoluble in all the recommended vehicles; formulated as a suspension in 1% methylcellulose

Current testing status: Toxicology

- Genetic toxicology studies – Potassium dicyanoaurate

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
AMES Screen	Covance UK	Sep 2013	Term	Dose concentrations set for GLP study
AMES GLP (OECD471)	Covance UK/ Annex VII	Jan 2014	Term	-ve result +/-S9
In vitro Micronucleus test (OECD487)	Harlan UK/ Annex VIII	Nov 2014	Ongoing	Covance UK did not have suitable containment for handling cell culture preparations

Current testing status: Toxicology

- Genetic toxicology studies – Silver cyanide

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
AMES Screen	Covance UK	Oct 2013	Term	Dose concentrations set for GLP study
AMES GLP (OECD471)	Covance UK/ Annex VII	Jan 2014	Term	-ve result +/-S9
In vitro Micronucleus test (OECD487)	Harlan UK/ Annex VIII	Nov 2014	Ongoing	Covance UK did not have suitable containment for handling cell culture preparations

Current testing status: Toxicology

- Irritation/Corrosion
  - » Skin
  - » Eye
- Skin Sensitisation
  - » LLNA

Current testing status: Toxicology

- Eye and Skin irritation studies – Potassium dicyanoaurate

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
In vitro Skin irritation (OECD439)	Harlan UK/ Annex VII	Jan 2014	Term	+ve result; CLP and GHS Category 2 (H315), DSD R38
In vitro Skin corrosion (OECD431)	Harlan UK/ Annex VII	Jan 2014	Term	-ve result; not corrosive to skin
In vivo Skin irritation (OECD404)	ASTA Medica/ Annex VIII	May 1992	Term	This study already existed; severely irritant in 3/3 animals
BCOP (OECD437)	Harlan UK/ Annex VII	Jan 2014	Term	+ve result; occular corrosive or severe irritant
In vivo Eye irritation (OECD405)	ASTA Medica/ Annex VIII	Sep 1992	Term	This study already existed; severe local effect in one animal

Current testing status: Toxicology

- Skin sensitisation studies – Potassium dicyanoaurate

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
LLNA (OECD429)	Harlan UK/ Annex VII	Jan 2014	Term	+ve result; SI of 7.98, 8.61 and 9.88 at 1, 2.5 and 5% concentrations
Adapted LLNA	MBR USA	Jul 2014	Term	+ve result: Draft report in production

  - » TSCA 8e notification submitted
  - » CLP update organised

Current testing status: Toxicology

- Eye and Skin irritation studies – Silver cyanide

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
In vitro Skin irritation (OECD439)	Harlan UK/ Annex VII	Jan 2014	Term	+ve result; CLP and GHS Category 2 (H315), DSD R38
In vitro Skin corrosion (OECD431)	Harlan UK/ Annex VII	Jan 2014	Term	-ve result; not corrosive to skin
BCOP (OECD437)	Harlan UK/ Annex VII	Jan 2014	Term	-ve result; not considered to be ocular irritant (IVIS=5.6)
In vivo Eye irritation (OECD405)	Harlan UK/ Annex VIII	Mar 2014	Term	+ve result in first animal tested. No further testing possible

Current testing status: Toxicology

- Skin sensitisation studies – Silver cyanide

Test	Laboratory/Endpoint	Draft/Final Report	Status	Comments
LLNA (OECD429)	Harlan UK/ Annex VII	Jan 2014	Term	-ve result; SI of 1.00, 0.88 and 1.09 at 0.5, 1 and 2.5% concentrations

Current testing status: Toxicology

- General toxicology studies – Potassium dicyanoaurate and Silver cyanide
- Performed at LPT laboratories and monitored by RSA
  - » Acute Studies
    - *Oral for silver cyanide and dermal for both substances*
  - » MTD/DRF studies
    - *For both substances*
  - » Repeat-dose toxicity/Reproductive toxicology screen

Current testing status: Toxicology

- General toxicology studies – Potassium dicyanoaurate

Test	Laboratory/ Endpoint	Draft/Final Report	Status	Comments
Acute oral (OECD425)	?/Annex VII	n/a	n/a	Study already existed
Acute dermal (OECD402)	LPT/Annex VII	17 Sep 2014	Term	LD50 >2000 mg/kg (unclassified)
MTD/DRF repeat dose	LPT	22 Sep 2014	Term	Dose levels of 1, 3, 10 mg/kg/day proposed for main study
Repeat dose tox/Repro tox (OECD422)	LPT/Annex VIII	Draft Jan 2015	In-life	

Current testing status: Toxicology

- General toxicology studies – Silver cyanide

Test	Laboratory/ Endpoint	Draft/Final Report	Status	Comments
Acute oral (OECD425)	LPT/Annex VII	19 Jun 2014	Term	Oral LD50 175 mg/kg
Acute dermal (OECD402)	LPT/Annex VII	17 Sep 2014	Term	LD50 >2000 mg/kg (unclassified)
MTD/DRF repeat dose	LPT	Draft Oct 2014?	In life	
Repeat dose tox/Repro tox (OECD422)	LPT/Annex VIII	Draft Feb 2015?	To be started	

Implications of results from toxicology studies

- Classification/Further testing – Potassium dicyanoaurate

Classification as of Feb 2014	Source	Further testing	Potential classification change?
Acute In tox. 2 (H330)	Soluble CNs	None required	No change
Acute De tox. 1 (H310)	Soluble CNs	LPT study (2014) LD50 >2000m/k	Not classified
Acute Or tox. 2 (H300)	Soluble CNs	ASTA Med study (1992) LD50 12.6-66.9m/k	No change
EUH032: contact with acids liberates very toxic gas		None required	No change
Skin Irrit. 2 (H315)	Berthold (1992a)	Warren (2014) in vitro 7.1% viability +42hrs	No change
Eye dam. 1 (H318)	Berthold (1992b)	Warren (2014) in vitro IS>55.1	No change
Skin Sens. 1 (H317)	Pooles (2014)	Adapted LLNA study draft result under verification	Skin sens 1 classification required

Implications of results from toxicology studies

- Classification/Further testing – Silver cyanide

Classification as of Feb 2014	Source	Further testing	Potential classification change?
Acute In tox. 2 (H330)	Soluble CNs	None required	No change
Acute De tox. 1 (H310)	Soluble CNs	LPT study (2014) LD50 >2000m/k	Not classified
Acute Or tox. 2 (H300)	Soluble CNs	LPT study (2014) LD50 175m/k	Change to Cat 3
EUH032: contact with acids liberates very toxic gas		None required	No change
Skin Irrit. 2 (H315)	KAuCN2	Warren (2014) in vitro 8.8% viability +42hrs	No change
Eye dam. 1 (H318)	KAuCN2 +ve BUT; Warren (2014) in vitro IS<55.1	Pooles (2014) in vivo eye irritation – severe reaction in first animal tested	No change

Implications of results from toxicology studies

- Classification/Further testing – Potassium dicyanoargentate

Classification as of Feb 2014	Source	Further testing	Potential classification change?
Acute In tox. 2 (H330)	Soluble CNs	Read across from soluble CN confirmed	No change
Acute De tox. 1 (H310)	Soluble CNs	Read across from soluble CN confirmed	No change
Acute Or tox. 2 (H300)	Soluble CNs	Read across from soluble CN confirmed	No change
EUH032: contact with acids liberates very toxic gas		None required	No change
Skin Irrit. 2 (H315)	$KAuCN_2$	None required	No change
Eye dam. 1 (H318)	$KAuCN_2$	None required	No change
Skin Sens. 1 (H317)	$KAuCN_2$	$KAuCN_2$ Adapted LLNA study draft result under verification	Read across skin sensitisation classification from $KAuCN_2$?

Status and timing of DNEL derivation

- To be assessed
  - » Insufficient data until completion of repeat-dose toxicology studies
- Timing
  - » Data will be available by the end of Q2 2015

Testing status at last WG meeting: Ecotoxicology

- Daphnia and ASRIT tests conducted for potassium dicyanoaurate and potassium dicyanoargentate
- Assessed whether mixture toxicity approach can be used to complete other endpoints
  - » Reliable prediction of potassium dicyanoargentate toxicity to Daphnia
  - » Suggests that prediction of toxicity to algae and fish would also be reliable
  - » Suggests that prediction of silver cyanide toxicity would also be reliable
  - » Poor prediction of potassium dicyanoaurate toxicity to *Daphnia*
  - » Uncertainty over gold cyanide speciation
- Mixture toxicity unreliable for potassium dicyanoaurate – fish and algal tests conducted

Testing status at last WG meeting: Ecotoxicology

Substance	Test	Final report	Result (mg test item/L)
Potassium dicyanoargentate	Daphnia EC50 Algal EC50 (growth rate) Fish LC50 ASRIT NOEC	April 2012 Predicted Predicted April 2012	0.022 >100 3.3 0.64
Silver cyanide	Daphnia EC50 Algal EC50 (growth rate) Fish LC50 ASRIT NOEC	Predicted Predicted Predicted Predicted	0.00056 80 3.0 0.0094
Potassium dicyanoaurate	Daphnia EC50 Algal EC50 (growth rate) Algal NOEC (growth rate and yield) Fish LC50 ASRIT EC50 ASRIT NOEC	April 2012 September 2013 September 2013 September 2013 April 2012 April 2012	0.2 30 6.4 5.7 406 60

Current testing status: Environment

- Acute ecotoxicity testing complete
- Sediment and terrestrial PNECs for potassium dicyanoaurate to be derived based on equilibrium partitioning
- Adsorption / desorption information required – literature data not available
  - » Test proposed – modified OECD 106 method (OECD 121 HPLC method specified in regulation not suitable for metals)
  - » Quotes received and Fraunhofer chosen as test laboratory
  - » Proposal signed (09/09/2014)
  - » Test item received at Fraunhofer (25 Sep)

Implications of results from ecotoxicology studies

- Classification/Further testing – ecotox

Substance	Environmental Classification	Classification change proposed?
Potassium dicyanoargentate	Aquatic acute 1 (H400) Aquatic chronic 1 (H410)	No
Silver cyanide	Aquatic acute 1 (H400) Aquatic chronic 1 (H410)	No
Potassium dicyanoaurate	Aquatic acute 1 (H400) Aquatic chronic 1 (H410)	No

- Acute ecotoxicity endpoints filled with testing or mixture toxicity predictions
- Further testing could potentially be required for PNEC refinement depending on results from risk assessment

Status and timing of PNEC derivation – gold cyanide complex

- Stability constant indicates it is unlikely there will be a high degree of dissociation of CN- from a gold cyanide complex in STP
- Aquatic PNECs derived for potassium dicyanoaurate based on ecotoxicity results for substance itself
- Terrestrial and sediment PNECs will be derived using equilibrium partitioning following results from adsorption / desorption study
  - » PNEC freshwater: 0.0002 mg KAuCN /L
  - » PNEC marine water: 0.00002 mg KAuCN/L
  - » PNEC intermittent releases: 0.002 mg KAuCN/L
  - » PNEC STP: 6.0 mg KAuCN/L

Status and timing of PNEC derivation – silver cyanide complex

- In STP the cyanide component of silver cyanide substances is likely to decompose – based on comparison of the stability constant for silver cyanide with other metal cyanide complexes
- Silver released from the cyanide complex likely to behave the same as ionic silver in the environment
- Recommendation that PNECs for silver cyanide and potassium dicyanoargentate are read across from silver
- Exposure assessment will look at emissions of silver compared to the silver PNECs to determine RCRs

5. Phase IV: Use, exposure, and emission data collection

1. Welcome and introduction
2. Phase I
3. Phase II: Data gap analysis and ITS
4. Phase III: Testing programme
5. **Phase IV: Use, exposure, and emission data collection**
   a. Use data collection and confirmation
   b. Exposure and emission data collection
   c. Potential monitoring needs
6. Phase V: Dossier finalisation
7. AOB, next meetings/calls and closing remarks

Renaud Nicolay & WCA

Use data collection

- Questionnaire has been circulated
- To be completed for Manufacture and all downstream uses of PM cyanide substances
- Select type of use at the top of the spreadsheet (Manufacture, Formulation, Industrial, Professional, Consumer, Article service life)
- Incompatible use descriptors are unable to be selected
- Selected use descriptors are compatible with those that can be selected

Environmental emissions data collection

- Emissions data will be used to develop the Generic Exposure Scenario (GES) in the CSR
- Site-specific exposure assessments will be conducted for each manufacturing site to demonstrate safe use if RCR<1
- Completing the questionnaire as fully as possible ensures the GES is representative and that safe use can be demonstrated for the site (site-specific data rather than EUSES defaults are most likely to achieve this)

Environmental emissions data collection

- Questionnaires circulated to collect environmental emissions data. Exposure assessment required for all PM cyanide substances
- Questionnaire to be completed once per site
- Covers
  - » Tonnages PM cyanide and other gold, silver and cyanide substances used at site
  - » Environmental emissions of gold, silver and CN- to air and water
  - » Any RMMs used on-site
  - » Information on the municipal STP and the final receiving

Environmental emissions data collection

- Questionnaire contains 3 tabs, for emissions of gold, silver and CN-
- If other gold, silver or cyanide substances are produced or used on site this needs to be declared – can assign the proportion of the emissions that comes from PM CN- substances
- If information on municipal STP and receiving water already collected for PGMs, this can be used – please indicate

Potential monitoring needs

- Site-specific monitoring programme launched for PGMs (aquatic and sediment) to refine environmental exposure assessment
- Recommended for sites with RCRs >0.5
- Until initial exposure assessment of PM CN- substances is run we cannot determine which sites may have RCRs >0.5 and therefore require monitoring or additional refinement of exposure assessment
- For companies involved in the PGMs programme it may be worth adding gold analysis (minimal cost)

Occupational exposure scenarios (occ. ES)

- Occ. ES are required for hazardous substances manufactured and/or imported at or above 10 tonnes per year
- According to ECHA guidance*, the scope of the exp. assessment has to be determined (please also see provided discussion paper)
- ECHA‘s official “Chemical Safety Assessment and Reporting tool” Chesar can be used for the development of (occ.) ES, also providing information on the scope of exposure assessment
- Information received that occ. ES are required for
  - tetrachloroauric acid
  - potassium dicyanoargentate
  - silver cyanide
  - potassium dicyanoaurate

  → Development of occ. exp. questionnaire for manufacturers

*ECHA Guidance on information requirements and chemical safety assessment, Part B: Hazard Assessment (version 2.1, December 2011), in particular Chapter B.8 thereof (Scope of Exposure Assessment)

Occupational exposure questionnaire

- Use of activity classes (ACs), defining a set of conducted activities, differentiation between:
  - process-driven emission potential (spraying, drying, transport operations etc.)
  - emission potential of handled material (dusty solids vs. solutions)
  - temperature-driven emission potential (ambient temperature vs. substantially elevated temperature)
- Introduction and detailed glossary provided for print-out
  - → Provided for your own comfort – please read thoroughly
- Information to be provided per substance
- Different ACs can be nominated per substance
- Please also provide information on availability of monitoring data (tailored submission form will follow in case of availability)

Tailored occ. exposure assessment

- Complexity of exposure assessment depends on:
  - Hazard potential of the substance (level of DNEL)
  - Emission potential
  - Identified uses (generic vs. specific assessments)
- Modelled vs. measured exposure data depends on:
  - Availability of monitoring data
    - Personal measurements
    - Inhalable fraction?
    - Substance-specific, e.g. analysed for Au
    - Contextual information complete?
  - Conservative model estimates may result in high RCRs
  - Other reasons for monitoring:
    - national legislation
    - product stewardship, etc.

… 5 min coffee break …

6. Phase V: Use, exposure, and emission data collection

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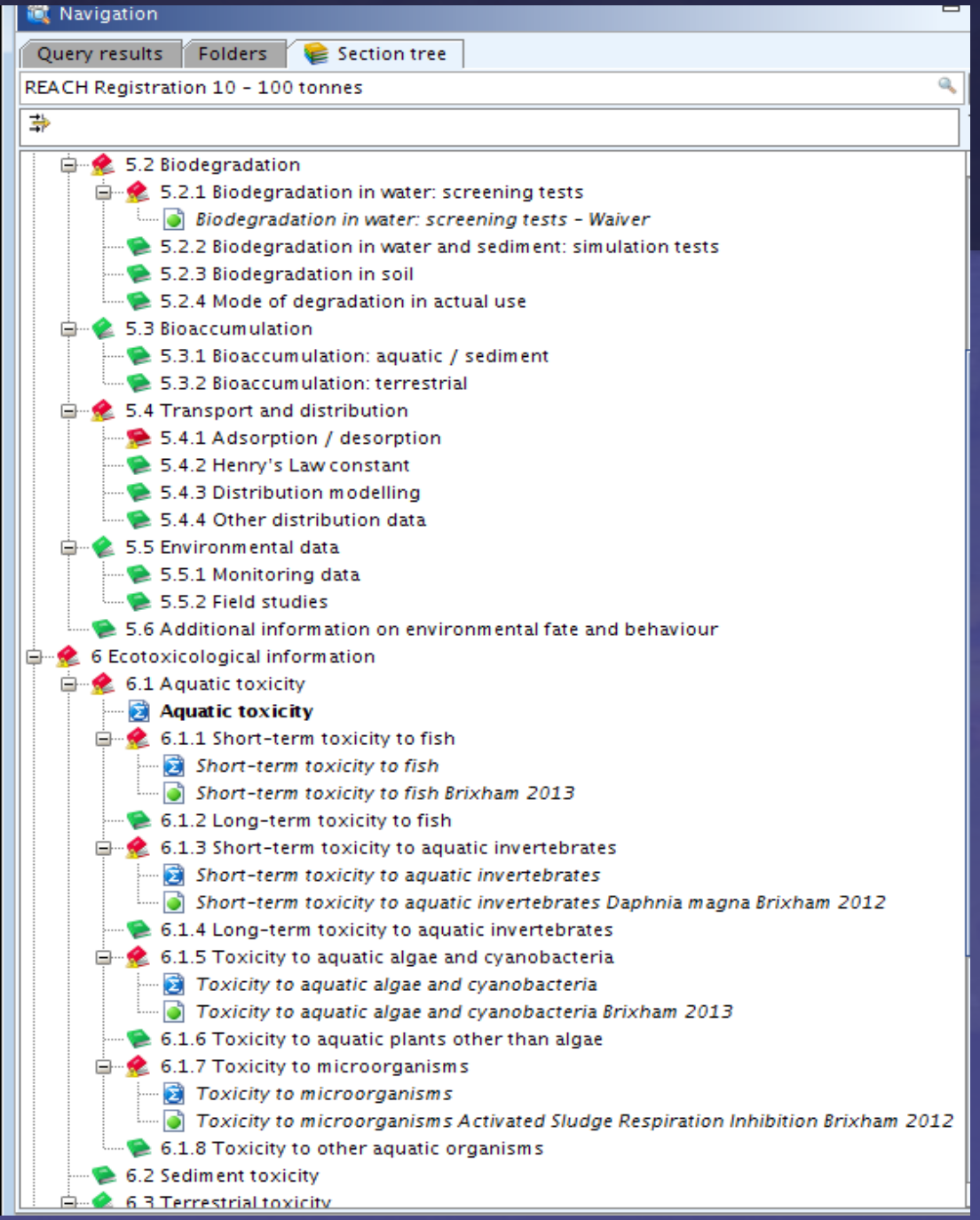
2. Phase I
3. Phase II: Data gap analysis and ITS
4. Phase III: Testing programme
5. Phase IV: Use, exposure, and emission data collection
6. **Phase V: Dossier finalisation**
   a. IUCLID dossier constitution
   b. Registration target and project full overview
7. AOB, next meetings/calls and closing remarks

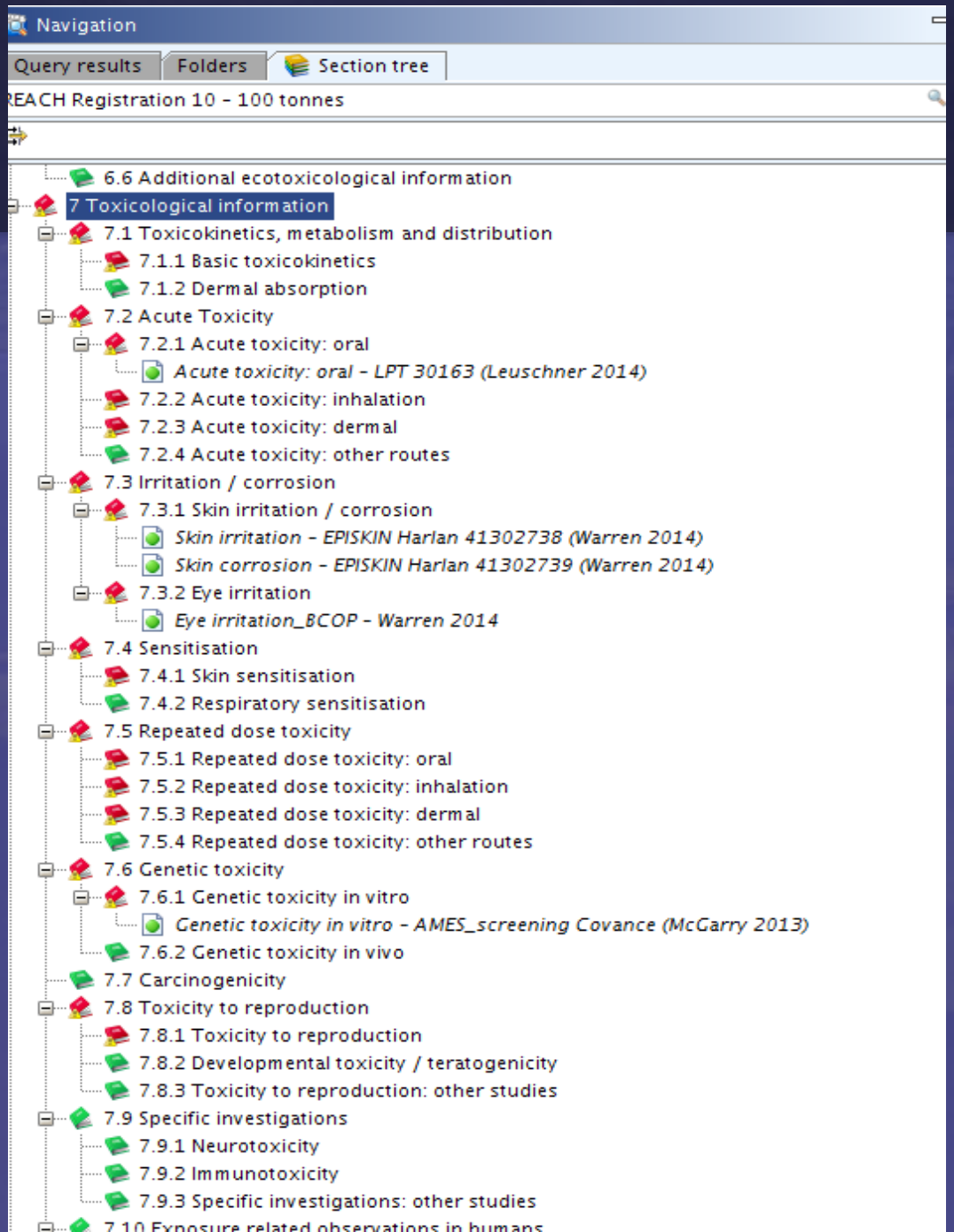
Renaud Nicolay & WCA



Potassium dicyanoaurate

- Phys-chem: Complete
- Environmental fate and ecotox: Studies entered as received
- Mamtox: Studies entered as received

Silver cyanide



- Phys-chem: Complete
- Environmental fate and ecotox: All studies entered. PNEC approach to be agreed and entered
- Mamtox: Studies entered as received

Potassium dicyanorgentate

- Phys-chem: Complete
- Environmental fate and ecotox: All studies entered. PNEC approach to be agreed and entered
- Mamtox: Previously agreed to read across from soluble cyanide substance. Suitable substance to be agreed and data access purchased

Project Work Plan 2008-2020

ID	Duration	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
0	3328 d?	Precious Metals Cyanides work plan as of Oct 08, 2014												
1	131 d?	tment of Consultant (CON) 30/09/08												
6	478 d?	- Literature Search and data gap analysis 31/07/10												
23	2583 d?			Phase 2 - Integrated Testing Strategy (read-across / grouping approach and testing strategy)										26/11/19
63	1212 d?				Phase 3 - Testing programme				23/06/15					
322	630 d?							Phase 4 - CSA/CSR Generation		29/02/16				
369	481 d								Phase 5 - Compilation of IUCLID 5 file & Registration Dossiers	3/05/16				
386	1 d?								Current earliest registration date	3/05/16				
387	1 d?								PMC Target: Early registration	30/06/16				
388	1 d?									Legal deadline: 2018 REACH registration term	31/05/18			
389	1064 d										Phase 6 - Post-registration			1/0

Project Work Plan 2013-2018

ID	Duration	2013 Q4	2014 Q1–Q4	2015 Q1–Q4	2016 Q1–Q4	2017 Q1–Q4	2018 Q1–Q4
0	3328 d?	Precious Metals Cyanides work plan as of Oct 08, 2014					
1	131 d?						
6	478 d?						
23	2583 d?	Phase 2 - Integrated Testing Strategy (read-across / grouping approach and testing strategy)					
63	1212 d?	3 - Testing programme		23/06/15			
322	630 d?		Phase 4 - CSA/CSR Generation		29/02/16		
369	481 d			Phase 5 - Compilation of IUCLID 5 file & Registration Dossiers	3/05/16		
386	1 d?				Current earliest registration date ◆ 3/05/16		
387	1 d?				PMC Target: Early registration ⇩ 30/06/16		
388	1 d?					Legal deadline: 2018 REACH registration term ⇩ 31/05/18	
389	1064 d						Phase 6 - Post-registration

7. AOB, next meetings/calls & closing remarks

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Steven Verberckmoes

Thank you
for your
attention
and
participation!